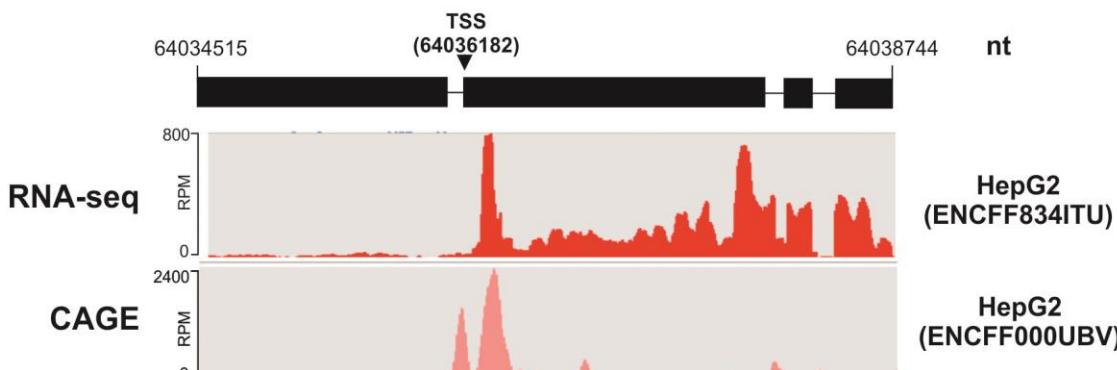


a



b

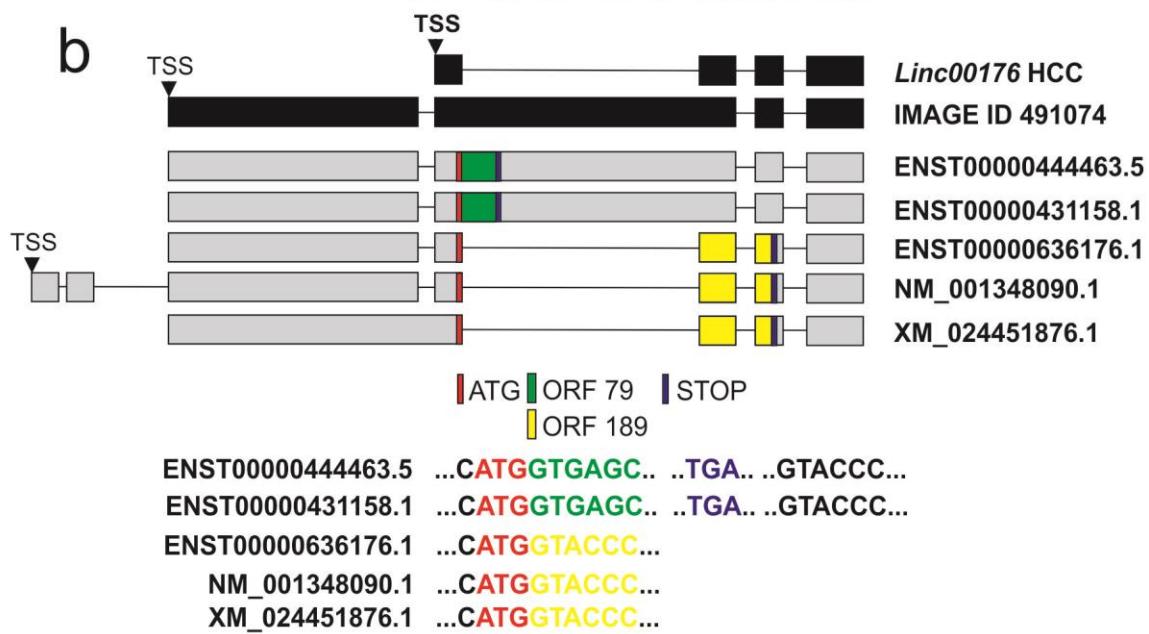
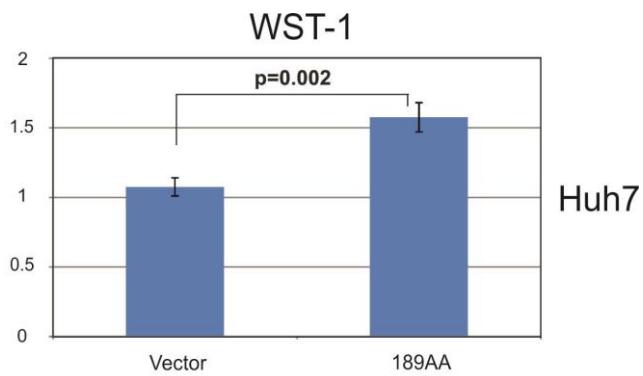
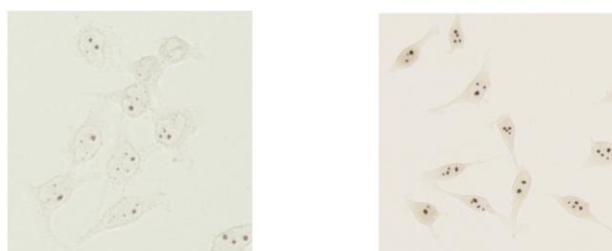
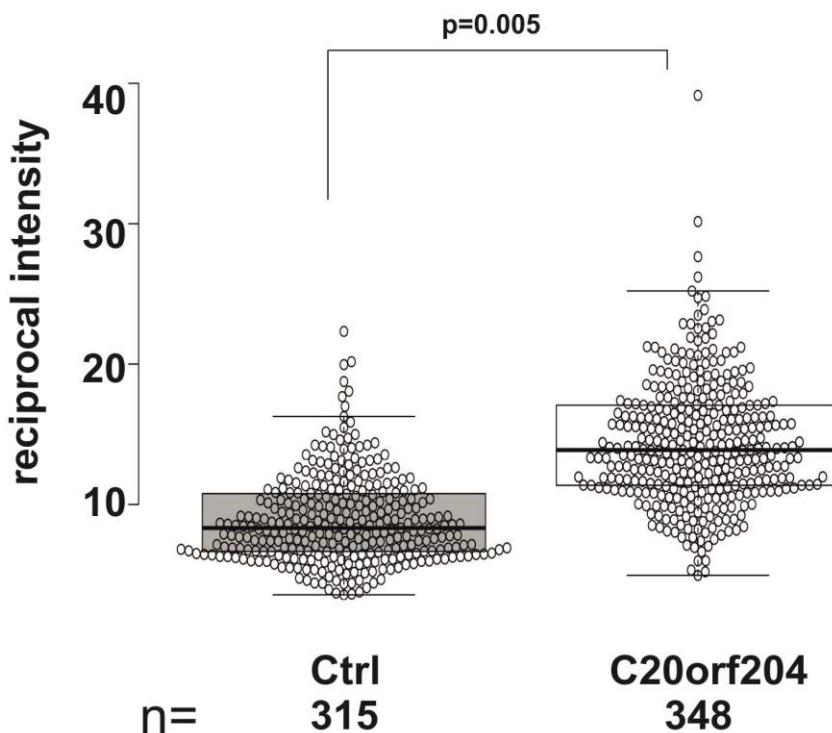


Fig. S1: a CAGE data shows a transcription start site (TSS) at nt 64036182 in HepG2 cell lines, corresponding to Linc00176 and no signal for other isoforms. b Scheme of Linc00176/C20orf204 (ENST00000444463.5, ENST00000431158.1, ENST00000636176.1, NM\_001348090.1 and XM\_024451876.1).

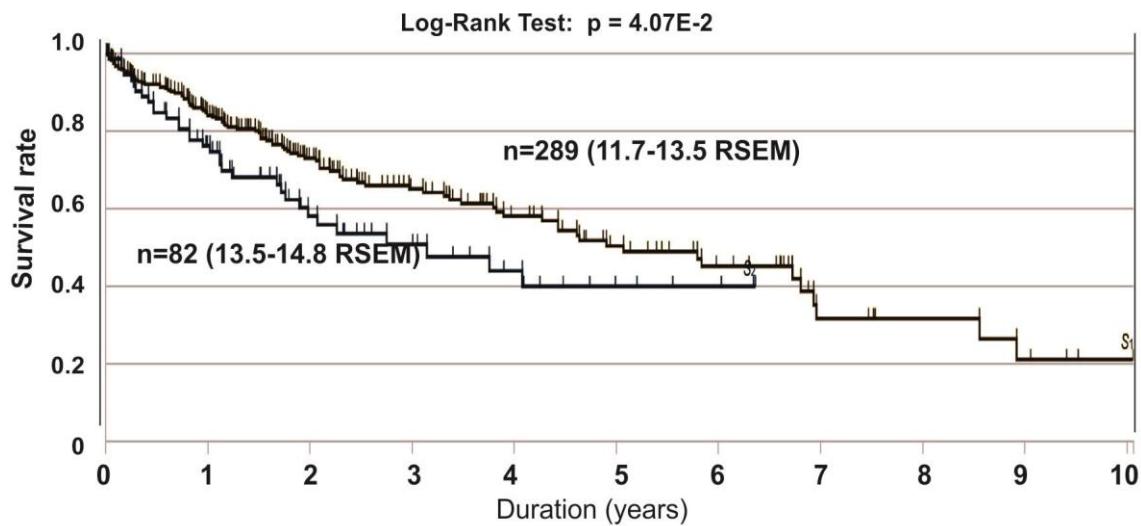
ENST00000636176.1 is identical to *Linc00176-HCC*, and ENST00000444463.5 is identical to IMAGE ID:491074 encoding a peptide 189 amino acids long (yellow). Notably ENST00000444463.5 and ENST00000431158.1 encode a peptide only 79 amino acids long (green).



**Fig S2.** Huh7 cells were transfected with Vector or pcDNA3.1-C20orf204-189AA for 2 days and supplied for WST-1-assay.



**Fig. S3:** HeLa cells were transfected, then fixed and IHC stained. To quantitate the intensity of nucleolin staining, reciprocal pixel intensity was determined by subtracting nucleolin intensity in 315 and 348 cells from the maximum pixel intensity in white unstained area from HeLa cells transfected with control vector (Ctrl) or vector carrying C20orf204 cDNA (C20orf204), respectively.



**Fig. S4:** Correlation between Nucleolin expression level (log<sub>2</sub> RSEM (RNA-seq by expectation-maximization)  $\geq$  13.5 (n=82); log<sub>2</sub> RSEM < 13.5 (n=289)) and survival time (with 10 years) is shown using Kaplan-Meier estimation (Log rank test: p=4.07e-2).

**Table S1:** PCR primer pair sequences for selected genes.

Gene	Accession number	Forward primer	Reverse primer
<i>Gapdh</i>	NM_002046	TGTTGCCATCAATGACCCCTT	CTCCACGACGTACTCAGCG
<i>C20orf204 F1Linc00176-E1 (F1-R1)</i>	NR_027686.1	ACTCCTGTCACCTGTGTGGT	GGCTGAAGAGGTAAGTCTGAGG
<i>C20orf204 4Ea (F2-R2)</i>	NR_027686.1	CAGGGACTCCTAGCGCGG	AGCGCCAGCTCCGTTATTG
<i>C20orf204 4Eb (F3-R3)</i>	NR_027686.1	ATGTATTTAGTCTGTGCAACGG	CAAGGCTCTGAAGTCCAGGA
<i>Nucleolin</i>	NM_005381.3	GGTGGTCGTTCCCCAACAAA	GCCAGGTGTGGTAAGTGCT
<i>rRNA 28S</i>	NR_046235.3	GGGATTATGACTGAACGCC	AACGTGCGGTGCGTGAC

Gapdh: glyceraldehyde-3 phosphate dehydrogenase (202 nt); C20orf204: (243 nt); -E1 (296 nt); C20orf204-E4a (243 nt); C20orf204-E4b (199 nt); Nucleolin (135 nt); rRNA 28s (269 nt)